

18. The long-term cumulative effects of the proposed subdivision **will/will not** unreasonably increase a great pond's phosphorus concentration during the construction phase and life of the proposed subdivision.
19. For any proposed subdivision that crosses municipal boundaries, the proposed subdivision **will not** cause unreasonable traffic congestion or unsafe conditions with respect to the use of existing public ways in an adjoining municipality in which part of the subdivision is located.
20. Timber on the parcel being subdivided **has not** been harvested in violation of rules adopted pursuant to Title 12, section 8869, subsection 14.

#### CONDITIONS

1. Approval is dependant upon, and limited to, the proposals and plans contained in the application dated June 1, 2007 and supporting documents and oral representations submitted and affirmed by the applicant, and conditions, if any, imposed by the Planning Board, and any variation from such plans, proposals and supporting documents and representations are subject to review and approval by the Planning Board

#### SITE PLAN REVIEW

##### Staff Comments:

1. Waivers:
  - a) None
2. Complete Application: Staff recommends that the Board vote to find the application compete
3. Public Hearing: A public hearing must be scheduled for this application.
4. Site Walk: A site walk has not been held for this project.

Findings of Fact and conclusions for the

#### **Windham Planning Board,**

The Site Plan application for 07-06 Village at Little Falls on Tax Map: 38, Lots: 6 and 7 is to be (**approved with conditions/denied**) with the following findings of fact and conclusions.

#### FINDINGS OF FACT

##### **Utilization of the Site**

- The central portion of the site is occupied by the abandoned mill building. In addition, the slabs or foundations of other structures still remain. The site is directly adjacent to the Presumpscot River and Little Falls Dam.

**VIL\_RESP04953**

- The downstream portion of the site is wooded.
- The proposed development will removed the existing mill building, concrete foundations and assorted debris.

#### **Adequacy of Road System**

- The findings of the traffic study, and the Town's peer review, are found in the subdivision review.
- The applicant will be contributing to utility and roadway improvements on Depot Street. The Town will be convening a meeting to determine the process through which these improvements will be made. As this is a joint project of the Town, applicant and Portland Water District, it is still unclear who will be developing the design engineering. As such, Larry Bastian's comments regarding the inclusion of these designs on the Village at Little Falls plans should be postponed at this time.

#### **Access to the Site**

- Larry Bastian, P.E. noted in the peer review that one of the entrances to the site is not included in the traffic study. The applicant should respond to this comment.

#### **Internal Vehicular Circulation**

- The internal street system appears to provide adequate internal circulation. The Fire Department may have comments on this aspect of the design.

#### **Pedestrian and Other Modes of Transportation**

- A new sidewalk will be constructed by the applicant on Depot Street.
- The plan provides internal sidewalks on one side of each roadway.

#### **Stormwater Management**

- The project will require a Site Location of Development Permit from the Maine Department of Environmental Protection (MDEP).
- The applicant has received approval from the MDEP to meet the quality, but not quantity standards of Stormwater Management Law. The "beat-the-peak" method to stormwater discharge is appropriate for this site's proximity to the river. Once the peer review issues have been resolved, the proposed stormwater management plan will meet the standards of Section 140-38A10 and Section 140-38G of the Site Plan Ordinance.
- Larry Bastian, P.E. of Gorrill-Palmer Consulting Engineers performed the peer review of the stormwater, soil and erosion control plans. Bastian's comments can be found in the attached letter dated July 5<sup>th</sup>, 2007. The extent of the comments is too large to include in this memo. It is sufficient to say that the applicant will be responding to Mr. Bastian's comments with a follow-up letter and revised plans (See note in Overview section).

**VIL\_RESP04954**

### **Erosion Control**

- Larry Bastian, P.E. provided a peer review of the erosion control plan in a letter dated July 5<sup>th</sup>, 2007. The findings of the peer review are attached to this memo. The applicant will respond to the peer review comments either before or at the July 23<sup>rd</sup>, 2007 meeting

### **Utilities**

- All utilities have been proposed to be underground.

### **Hazardous, Special and Radioactive Materials**

- None.

### **Technical and Financial Capacity**

- See subdivision review.

### **Solid Waste**

- Solid waste will be the responsibility of the condominium association.

### **Historic, Archaeological and Botanical Resources**

- The Maine Historic Preservation Commission has requested a Phase II archaeological study of the section along the proposed Dogwood Drive. The applicant will forward the findings of this study to the Town and State.
- See Subdivision review for Maine IF&W and Maine Department of Conservation statements of no impact.

### **Landscape Plan**

- The applicant has submitted a landscape plan on sheet L-1.
- Staff is pleased that trees have been proposed along Depot Street.
- The applicant should discuss how the planting plan meets the requirements of the Maine Department of IF&W's comments regarding revegetation along the Presumpscot River.

### **Others**

- See subdivision review.

**VIL\_RESP04955**



## CONCLUSIONS

1. The proposed site plan **will not** result in undue water or air pollution.
2. The proposed site plan **has** sufficient water available for the reasonably foreseeable needs of the site plan.
3. The proposed site plan **will not** cause an unreasonable burden on an existing water supply.
4. The proposed site plan **will/will not** cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results.
5. The proposed site plan **will/will not** cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed.
6. The proposed site plan **will/will not** provide for adequate sewage waste disposal.
7. The proposed site plan **will not** cause an unreasonable burden on the municipality's ability to dispose of solid waste.
8. The proposed site plan **will/will not** have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or the municipality, or rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline.
9. The proposed site plan **conforms** with a duly adopted site plan regulation or ordinance, comprehensive plan, development plan, or land use plan.
10. The developer **has** adequate financial and technical capacity to meet the standards of this section.
11. The proposed site plan **is** situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in Title 38, Chapter 3, subchapter I, article 2-B M.R.S.A.
12. The proposed site plan **will/will not** alone or in conjunction with existing activities, adversely affect the quality or quantity of ground water.
13. The proposed site **is** situated entirely or partially within a floodplain.
14. All freshwater wetlands **have** been shown on the site plan.
15. Any river, stream, or brook within or abutting the site plan **has** been identified on any maps submitted as part of the application.
16. The proposed site plan **will/will not** provide for adequate storm water management.
17. The proposed plan **will not** negatively impact the ability of the City to provide public safety services.

## CONDITIONS

1. Approval is dependant upon, and limited to, the proposals and plans contained in the application dated July 1, 2007, and supporting documents and oral representations submitted and affirmed by the applicant, and conditions, if any, imposed by the Planning Board, and any variation from such plans, proposals and supporting documents and representations are subject to review and approval by the Planning Board.





Gorrill-Palmer Consulting Engineers, Inc.

*Traffic and Civil Engineering Services*

PO Box 1237  
15 Shaker Rd.  
Gray, ME 04039

207-657-6910  
FAX: 207-657-6912  
E-Mail: mailbox@gorrillpalmer.com

July 5, 2007

Mr. Brooks More, AICP  
Director of Planning  
Town of Windham  
8 School Street  
Windham, ME 04062

Subject: Village at Little Falls  
Stormwater Management, Traffic and General Engineering Peer Review

Dear Brooks,

As requested by your office, Gorrill-Palmer Consulting Engineers Inc. has conducted a peer review of the stormwater management, traffic and general civil engineering design aspects of the above referenced project. Our review has focused on:

- ❖ Whether the project appears to conform to standard engineering practice, and any revisions which may be desirable.
- ❖ Whether the project appears to conform to the requirements of the Town of Windham Zoning, Subdivision and Surface Water Protection Ordinances, and any revisions which may be desirable.

Information provided to Gorrill-Palmer Consulting Engineers Inc., as prepared by Northeast Civil Solutions, Inc. (NCS) includes:

- ❖ Preliminary Subdivision Application & Final Site Plan Application, Village at Little Falls, June 2007
- ❖ Village at Little Falls Plan Set, stamped "Preliminary Review 6-1-07"
- ❖ Subdivision/Site Plan Pre-Application, dated March 2007

Gorrill-Palmer's review of the application materials was limited to stormwater management, general engineering and traffic elements. Gorrill-Palmer's review specifically excluded the Voluntary Response Action Plan (VRAP), geotechnical report, condominium documents (except as related to site and stormwater management system maintenance), and Conditional Letter of Map Revision based on Fill (CLOMR-F). Gorrill-Palmer did not conduct a detailed review of water and sewer plans and details because we understand that Portland Water District (PWD) will review and approve the water and sewer plans.

#### **Conformance to Standard Engineering Practice**

The analysis conducted by NCS utilized the methodology outlined in "Urban Hydrology for Small Watersheds, Technical Release 55 (TR55), USDA, Soil Conservation Service for calculation of watershed area, curve number, and time of concentration. NCS utilized the HydroCAD Stormwater Modeling Program, which is based upon the routing methodology contained within Technical Release No. 20, USDA, Soil Conservation Service. The use of these programs is in keeping with the standard engineering practices within the State of Maine.

**VIL\_RESP04957**

Mr. Brooks More  
July 5, 2007  
Page 2 of 8

### **Stormwater Management Plan Review**

Gorrill-Palmer reviewed the stormwater management report and plans and spot-checked the calculations. We present the following comments for your consideration and response as appropriate:

#### **General Comments:**

1. Since the development includes more than 3.0 acres of impervious area, it requires a Site Location of Development Act (SLDA) permit from the Maine DEP. The project is subject to the MDEP Stormwater Management Law (effective November 2005) and is required to meet Basic Standards and General Standards as defined in the Law. We understand that MDEP has agreed with the applicant that the MDEP Flooding Standard is not applicable to this project, due to direct discharge of stormwater to the Presumpscot River and the presumption of no significant impact on peak flows downstream of the site. Stormwater detention facilities to control peak rates of runoff from the development are therefore not required. Gorrill-Palmer has not reviewed the project for conformance to the MDEP Stormwater Management Law, nor for conformance with SLDA requirements.
2. The development proposes to use an underground detention and soil filter (StormTech) system and bioretention cells to provide water quality treatment required by MDEP Stormwater Law standards.

#### **Stormwater Management Report:**

3. Appendix B - The stormwater report shows an offsite drainage area of +/- 6.3 acres that presently drains into an existing culvert under the railroad tracks and flows across the property to the Presumpscot River. This drainage area includes High Street, several houses and open areas. This area appears to measure approximately 7.5 acres from the map provided in the report. The size of this drainage area should be confirmed using 1"=2000' scale USGS topographic maps.
4. Appendix I - The maintenance contract with Clean Harbors should specify that all components of the proposed stormwater management system will be maintained in accordance with the maintenance plan approved by the Maine DEP. The contract should also specify that the StormTech detention/filter system will be maintained in accordance with the Manufacturer's recommended maintenance plan.
5. Appendix L - The condominium association documents, Article 8, Section 8.2, should specify that Portland Water District will maintain the sewage pump station and sewer system, if that is the intent of the applicant.
6. Appendix L - Provisions i thru vi relating to stormwater management system maintenance should be revised to include maintenance of bioretention cells and maintenance of the StormTech detention/filter system in accordance with the manufacturer's recommended maintenance plan.

#### **Exhibit 14, Conformance with Town Site Plan Requirements**

7. Section F on page 2 states that "stormwater will be detained onsite in order to reduce stormwater discharge to rates less than predevelopment flows." A similar statement also appears on page 1 of Exhibit 18, Community Facilities Impact. These statements should be revised to indicate that increased site runoff is not anticipated to increase peak flow rates in the Presumpscot River.

#### **Underground Detention/Filter System:**

8. Gorrill-Palmer did not conduct a detailed review of the detention/filter system design. We assume that NCS will coordinate design details with the StormTech manufacturer's representative and that MDEP will review the design for conformance with MDEP Stormwater Law Standards.



Mr. Brooks More  
July 5, 2007  
Page 3 of 8

9. The plans show the offsite area noted in the comment #3 draining into the proposed storm drainage system for the development, and flowing into the proposed detention/filter system. The stormwater calculations indicate that sizing of the detention/filter system is based on the proposed impervious and landscaped areas within the development, not including the offsite area. The applicant should request MDEP to confirm that the detention/filter system is appropriately sized to handle both onsite and offsite runoff as proposed.
10. Depending on MDEP confirmation of the detention/filter system sizing as noted in the previous comment, NCS may need to consider either bypassing the offsite flows around the system, or other modifications to the proposed design.
11. If the offsite drainage area is directed to the detention/filter system as designed, the plans should include sediment pretreatment measures for this offsite flow.
12. The plans appear to use catch basins with 3-foot deep sumps and hoods for sediment pretreatment of stormwater flows to the detention/filter system. NCS should provide sediment volume calculations based on MDEP requirements and confirm that adequate sediment storage volume is provided.

#### **Plan Set Review**

##### **General Comments:**

13. Notes referring to the Depot Street reconstruction plans should be added to each of the Grading and Drainage Plan, Site Plan, and Utility Plan sheets bordering Depot Street. Limits of construction, pavement sawcut locations, grading, utilities, drainage systems and other construction should be coordinated with the Depot Street Improvement plans. If the Depot Street Improvement Project may be constructed under a separate contract, the plans should contain specific information and notes to coordinate Depot Street construction with onsite construction.
14. Plans should include trench cap details conforming to Town and MDOT requirements for all proposed utility construction within Route 202 and Depot Street.

##### **Sheet 2 of 38, Existing Conditions Plan:**

15. The plan should be stamped by a surveyor licensed in Maine.
16. Abutting properties across Depot Street and the railroad ROW should be shown on this plan and the preliminary subdivision plan.

##### **Sheet 3 of 38, Preliminary Subdivision Plan:**

17. All State and Federal permits applicable to the project should be noted on the subdivision plan.
18. A note referring to the Conditional Letter of Map Amendment based on Fill (CLOMR-F), as approved by FEMA, should be included on the plan.
19. The source of the boundary survey should be clearly noted on the plan.
20. Note 20 should be revised when the Phase II archaeological survey has been completed.
21. The plan shows a "proposed 20' grading easement" within the existing railroad tracks on the east side of the project. The applicant should provide documentation that this easement has been approved by MDOT, and the Railroad if applicable.
22. Gorrill-Palmer assumes that a condominium plat plan suitable for recording at the Cumberland County Registry of Deeds will be submitted with the final subdivision application.



Mr. Brooks More  
July 5, 2007  
Page 4 of 8

Sheet 4 of 38, Demolition Plan

23. This plan should include notes referring to fill requirements and other applicable provisions of the project geotechnical report.
24. A plan, details and specifications for the preload area should be provided.
25. A demolition-phase erosion control plan should be included in the plan set, showing required erosion control measures as stated in Note 3 on this plan.
26. Site access locations for demolition operations should be shown on the plan.
27. Note 4 states that "site cleanup and demolition must be limited to the parcel owned by HRC..." The plan should include appropriate easements relating to any work outside the site boundaries, specifically any work in the Railroad ROW (as shown on the Grading Plans, Sheets 7 and 8 of 38), and removal of the existing building that straddles the property line at the northeast corner of the site.
28. The existing railroad tracks abutting the site should be shown on the plan.

Sheet 6 of 38, Grading & Drainage Plan – Sheet 2

29. Grading at the proposed curb line along the south side of Depot Street does not show the 6" curb reveal.
30. Guardrail should be provided at the paved apron on the west side of the pump station generator building adjacent to the riverbank slope.
31. Note 7 refers to the Geotechnical Report by Oak Engineers dated February 27, 2007. The plan set and contract documents should clearly specify the contractor's responsibility to complete construction in accordance with the Geotechnical Report, as determined appropriate by NCS.
32. The riverbank restoration slope appears to be in the range of 1.7H:1V to 2H:1V. These slopes are proposed to be stabilized with erosion control blanket and plantings. The geotechnical report, page 14 (Fill and Backfill section) states that permanent slopes steeper than 2H:1V should be stabilized with riprap, and that river banks should not exceed 2H:1V. The applicant should submit slope stability calculations for the proposed riverbank slopes.
33. Proposed storm drains are located within 4 to 8 feet of units 17, 18 and 19, with the proposed storm drain approximately 9 feet below proposed finish floor. There appear to be similar proposed conditions at other locations within the development. NCS should confirm that proposed pipe materials are suitable for installation at locations close to foundations where the proposed pipe may be located within the soil support zone below the proposed building foundations. Future storm drain maintenance implications should also be considered.

Sheet 7 of 38, Grading & Drainage Plan – Sheet 3

34. The plan should include a note referring to the Depot Street Improvement Project, as on Sheet 6.

Sheet 8 of 38, Grading & Drainage Plan – Sheet 4

35. The plan shows a stabilized area (loam & seed over gravel) to access the DETENTION/FILTER system for maintenance. The Landscape Plan (L1) shows two proposed trees that appear to be within the access area. The access area should be kept clear of landscaping and other obstructions.
36. The proposed 30-inch storm drain to the StormTech detention/filter system (pipe P-2) appears to be +/- 5 feet off the building foundation and below the level of the footing, based on the floor elevations noted. NSC should confirm suitability of proposed pipe materials for proposed installation near building foundations and below the footing bearing zone (similar to comment #33).
37. The bioretention cell behind unit #66 appears to be located within several feet of the proposed storm drain to the detention/filter system, with a bottom of underdrain elevation near the top of the proposed storm drain.

Mr. Brooks More  
July 5, 2007  
Page 5 of 8

The design should be reviewed to provide adequate separation between the bioretention cell and the storm drain.

38. This office recommends placement of cleanout risers at the ends of all underdrain pipe runs for the bioretention cells.

Sheet 11 of 38, Site Plan – Sheet 2

39. The barrier-free ramp at the northwest corner of the Sweetflag Drive/Lupine Lane intersection should be revised to align with the proposed crosswalk.

Utility Plans, General Comments

40. We assume that NCS will coordinate electrical service and other wire utility locations with CMP and other utility companies and will show the approved locations on the final plans.
41. Underground utility services to the proposed buildings should be shown on the final construction drawings.
42. The plans show several locations with proposed water lines and water valves located less than 5 feet away from proposed storm drain pipes and catch basin structures. We assume that NCS will coordinate with PWD to conform to their minimum pipe separation standards and all other PWD requirements.
43. Gorrill-Palmer assumes that NCS will coordinate with the Windham Fire Department for approval of hydrant locations and sufficiency of proposed fire flows within the development.
44. Utility Plan sheets 3 and 4 should include notes necessary to coordinate sitework and utility construction with proposed reconstruction of the existing 36-inch storm drain pipe across the site from Depot Street to the river. We understand that the storm drain reconstruction plans are being prepared under separate contract to the Town and that NCS is coordinating sitework design with the storm drain design by others.

Sheet 16 of 38, Utility Plan – Sheet 2

45. There appears to be an existing utility pole located within the proposed barrier-free ramp at the southeast corner of Depot Street & Trillium Drive. NCS should confirm that minimum required accessible route clearances are provided in accordance with ADA (Americans with Disability Act) Standards.

Road, Sewer and Water Profiles – General Comments

46. The profiles appear to show 5.5 feet of cover on water lines and less than 1 foot of vertical separation from sewer lines at several locations. We assume that NCS will coordinate with PWD to meet their minimum pipe separation requirements.

Sheet 23 of 38, Erosion and Sedimentation Control Plan – Sheet 1

47. As noted in comment #25, a demolition phase erosion control plan should be included in the construction plan set. That plan, or a supplemental plan for the initial site grading and fill phase, should delineate the preload area and any necessary erosion control measures and should include necessary Best Management Practices (BMPs) to control sedimentation after demolition before the site is stabilized (such as stone check dams, sediment traps, sedimentation basins, etc.).
48. This plan shows silt fence across proposed storm drain outlets. Silt fence is not appropriate for sediment control at concentrated flow points; other BMPs should be specified for such locations.
49. The erosion control plans should refer to the riverbank stabilization details on Sheet 26 of the plan set.
50. Slope stabilization requirements should be shown or noted on the erosion control plans.
51. The location of the construction fence should be coordinated with the grading plan in the area of the grading easement at the railroad ROW.



Mr. Brooks More  
July 5, 2007  
Page 6 of 8

Sheet 24 of 38, Erosion and Sedimentation Control Notes

52. In general, the notes should be revised as necessary to incorporate provisions of the Erosion and Sedimentation Control narrative (Section 11) that apply to the construction phase. Some of the requirements stated in Section 11 do not appear to be included or appear to contradict the plan notes. These include stormwater diversion, dust control, slope stability and problem areas (Section 2.0); temporary non-structural measures (Section 3.0); permanent seed mixture (Section 4.0); and maintenance (Section 5.0).

Sheet 25 of 38, Erosion and Sedimentation Control Details

53. Additional erosion control details may be necessary to address the demolition and initial site grading phases of the project, such as stone check dam, sediment trap and sedimentation basin.

Sheet 26 of 38, Erosion and Sedimentation Control Details

54. The riverbank restoration plan view and profile should include notes that require construction in accordance with the project geotechnical recommendations.
55. Design calculations for the proposed riprap installation at the base of the slope should be provided. Calculations should address applicable requirements from the geotechnical report as well as riverbank protection requirements for a specific design flood.

Sheet 27 of 38, Underground Detention Details – Sheet 1

56. NCS should confirm the following design details for the detention/filter system with the StormTech manufacturer's representative:
- ◆ The filter cross section shows the StormTech chambers wrapped in woven geotextile. Is this required for all rows of the proposed system?
  - ◆ The detention/filter system layout does not appear to direct stormwater flows to a single isolator row as typically recommended by the manufacturer.
  - ◆ We recommend that NCS confirm the size and specifications for the crushed stone material surrounding the chambers.
  - ◆ We recommend that NCS consider placement of geotextile material to separate the crushed stone chamber bedding and soil filter layers.
  - ◆ It appears that additional cleanout/inspection ports are needed.
  - ◆ The impermeable liner should be shown on the filter cross section.

Sheet 29 of 38, Drainage & Construction Details

57. The typical pipe section should note the type of pipe.
58. The precast concrete catch basin detail notes an RCP outlet pipe with a catch basin hood. Is RCP pipe proposed only for catch basin connections? If so, a detail for adapting to other types of storm drain pipe should be included.
59. Are catch basin hoods proposed for all catch basins?
60. A bioretention cell cleanout detail should be provided.

Sheet 33 of 38, Construction Details

61. A detectable warning strip conforming to ADA requirements should be added to the handicap ramp detail.
62. A typical section for Depot Street reconstruction should be provided.



Mr. Brooks More  
July 5, 2007  
Page 7 of 8

Sheet 34 of 38 (S1), Proposed Retaining Wall Plan, Section, Elevations

63. Slope grading shown on the partial site plan does not appear to agree with the grading plan (Sheet 6 of 38). The partial site plan shows a top of slope elevation 112 and 2H:1V slopes, compared to the grading plan which shows top of slope elevation 114 and approximately 1.7H:1V slopes, respectively. The plans should be revised accordingly.
64. The extent of riprap shown on the elevation view does not appear to match the riprap detail shown on the riverbank protection detail (sheet 26 of 38). These two plans should be coordinated and revised accordingly.

Sheet 38 of 38, Plan & Profile – Depot Street

65. The plan view should show all proposed construction, including pavement sawcut locations, new pavement, limits of construction, proposed grades, fill slopes, etc.
66. A note referring to the proposed site construction plans and requiring the contractor to coordinate construction with onsite work should be added to the plan.
67. The plan should note that any existing ROW monuments or other survey markers disturbed by construction shall be reset by a Maine-licensed Land Surveyor in accordance with Town Standards.
68. Any required alteration of existing catch basins, sanitary manholes, fire hydrants or other utility structures should be noted on the plans.
69. The plan appears to show proposed sewer replacement extending south on a side street from manhole SMH-5. Limits of construction should be shown on the plan, or plans should be provided for construction extending beyond the limits of this plan sheet, if applicable.

**Traffic Review**

Gorrill-Palmer reviewed the traffic study prepared by Bill Bray and dated March 2007. We also completed a site visit on June 2, 2007. The study was completed in accordance with current industry standard practice. We present the following comments for the applicant's consideration and response as appropriate:

1. We concur with the trip generation, traffic volume adjustments, and crash analysis. We would question the full occupancy date of 2009, but given the 1% annual adjustment to the background volumes, we would not expect that a study horizon several years later would affect the conclusions of the study.
2. The capacity analysis showed only one movement below level of service "D" out of the several intersections that were studied. This was the Chute Road westbound thru-left turn movement at River Road. The volumes indicate only 3 right turns out of Chute Road, which would not justify a separate turn lane. The volumes exiting Chute Road would not likely satisfy a signal warrant; therefore, the lower level of service is acceptable.
3. The study did not address the potential need for a left turn lane on River Road at Depot Street. Since the proposed project sends the majority of the site-generated traffic through this intersection, we suggest that a left turn warrant evaluation be provided.
4. The MaineDOT crash summary report should be provided for our review.
5. The traffic study discusses only two driveways in the sight distance analysis. The plans show three driveways and an emergency vehicle access. The Depot Street Plan & Profile (Sheet 38 of 38) indicates that Depot Street will be reconstructed in the vicinity of Trillium Lane to achieve a minimum 250 feet of sight distance. Based on our field review and this plan, sight distances appear to be adequate. However, the applicant should clarify the driveway situation and provide their own assessment of the sight distances.

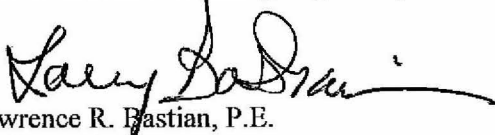
Mr. Brooks More  
July 5, 2007  
Page 8 of 8

**Closing**

Our office is available to review any revisions to the plans to address the items noted above. Please contact this office with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.

A handwritten signature in black ink, appearing to read "Larry Bastian", with a long horizontal flourish extending to the right.

Lawrence R. Bastian, P.E.  
Senior Engineer

Enc.

Copy: Lee Allen, Northeast Civil Solutions, Inc.  
Steve Etzel, HRC

U:\887.22\VLF Comments1\_7-3-07.doc

**VIL\_RESP04964**





OPEN  
SPACE

LOT

PROPOSED  
REMAINING PORTION  
OF MILL BUILDING  
10,650 S.F.

PRESUMPSCOT  
RIVER

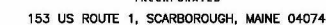
ROUTE 202

**VIL RESP04965**

PROJECT NUMBER:	29522.6	ACAD FILE:	29522-SKETCH-CONCEPT2.DWG	SCALE:	1" = 50'	DATE:	NOVEMBER 4, 2009
-----------------	---------	------------	---------------------------	--------	----------	-------	------------------

Prepared For:

**HRC-VILLAGE AT LITTLE FALLS, LLC**  
2 MARKET STREET, PORTLAND, MAINE 04101



tel	fax	e-mail
207.883.1000	207.883.1001	info@northeastcivilsolutions.com
and 883.2227		

SHEET 1 OF 1





MAINE CENTRAL RAILROAD

LOT 4

LOT 6

LOT 3

PROPOSED  
16 UNIT  
APARTMENT  
BUILDING  
24 PARKING  
SPACES  
(UNDER  
GROUND)

LOT 2

PROPOSED  
PARK WITH  
GAZEBO

LOT 5

PROPOSED  
REMAINING PORTION  
OF MILL BUILDING  
10,650 S.F.

PROPOSED  
1ST FLOOR RETAIL  
2ND FLOOR  
RESIDENTIAL  
48' x 130' =  
6,240 S.F.

LOT 1

PRESUMPCOT  
RIVER

ROUTE 202

NOTES

VIL\_RESP04966

Revisions	By	Date	Changes

PROJECT NUMBER: 29522.6 ACAD FILE: 29522-SKETCH-CONCEPT3.DWG SCALE: 1" = 50' DATE: NOVEMBER 4, 2009

Drawing Name:  
**SKETCH PLAN - CONCEPT 3**

Project Name and Location:  
**VILLAGE AT LITTLE FALLS**  
ROUTE 202, WINDHAM, MAINE

Prepared For:  
**HRC-VILLAGE AT LITTLE FALLS, LLC**  
2 MARKET STREET, PORTLAND, MAINE 04101

SURVEYING ENGINEERING LAND PLANNING  
**Northeast Civil Solutions**  
INCORPORATED  
153 US ROUTE 1, SCARBOROUGH, MAINE 04074  
tel 207.883.1000 fax 207.883.1001 e-mail info@northeastcivilsolutions.com  
800.882.2227

SHEET 1 OF 1

0 50' 100' 200'

ES:\LAND PROJECT\29522\29522.6 - LITTLE FALLS\LAND\29522-SKETCH-CONCEPT3.DWG

**ENVIRONMENTAL SITE ASSESSMENT - PHASE I & II  
FORMER STEEL MILL PROPERTY  
ROUTE 202 AND DEPOT STREET  
WINDHAM, MAINE**

**95-499 E & 95-499.1 E November 17, 1997**

## TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
1.1 Scope of Services.....	1
1.2 Purpose .....	5
1.3 History .....	5
1.4 Limitations.....	5
2.0 SITE DESCRIPTION.....	5
2.1 Location and Legal Description .....	5
2.2 Current Uses of the Site .....	5
2.3 Description of Structures and Utilities .....	6
2.4 Site and Vicinity Characteristics .....	6
2.5 Past Uses of the Site .....	7
2.6 Past and Current Uses of Adjoining Properties .....	7
3.0 RECORDS REVIEW.....	8
3.1 Standard Federal and State of Maine Environmental Record Sources .....	8
3.1.1 EPA List.....	8
3.1.2 Uncontrolled Hazardous Substances Sites Program List.....	8
3.1.3 Solid Waste Facility List.....	8
3.1.4 BRWM Registered and Removed Underground Storage Tanks (UST's).....	9
3.1.5 Spill Reports.....	9
3.2 Physical Setting .....	10
3.2.1 MGS Maps .....	10
3.2.2 NRCS Soil Survey.....	11
3.2.3 USGS Topographic Map.....	11
3.3 Historical Use Information.....	11
3.3.1 Review of Aerial Photographs.....	12
3.3.2 Land Title Records.....	13
3.3.3 Windham Public Library.....	14
3.3.4 Windham Historical Society.....	15
4.0 SITE RECONNAISSANCE AND OBSERVATION OF HAZARDOUS SUBSTANCES.....	15
4.1 Site Reconnaissance.....	15
4.1.1 Structures and Yard .....	16
4.1.2 Forested Area .....	19
4.2 Potentially Hazardous Substances in Connection with identified Uses .....	20
4.3 Hazardous Substance Containers and Unidentified Substance Containers.....	20
4.4 Storage Tanks .....	20
4.5 Indications of PCB's .....	20
4.6 Indications of Solid Waste Disposal .....	21
4.7 Physical Setting Analysis.....	21
5.0 EXPLORATION AND TESTING .....	21
5.1 Exploration.....	21
5.2 Headspace Analysis .....	22
5.3 Analytical Testing.....	22
6.0 OBSERVATION AND MONITORING OF REMEDIATION.....	24
6.1 Soil Remediation.....	24
6.2 Field Testing .....	25
6.3 Analytical Testing.....	25
7.0 FINDINGS AND CONCLUSIONS.....	26
8.0 CLOSING .....	28
APPENDIX A.....	Limitations
APPENDIX B.....	Maps
APPENDIX C.....	Color Photographs
APPENDIX D.....	Legal Description
APPENDIX E.....	Registered & Removed UST's
APPENDIX F.....	Spill Reports
APPENDIX G.....	Test Pit Explorations
APPENDIX H.....	Headspace Analysis Readings
APPENDIX I.....	Analytical Laboratory Reports





ENGINEERING, INC.  
GEOTECHNICAL CONSULTANTS

Gray Plaza, P.O. Box 378, Gray, ME 04039 TEL (207) 657-2866 FAX (207) 657-2840

Six Liberty Drive, Bangor, ME 04401 TEL (207) 848-5714 FAX (207) 848-2403  
161 Water St., P.O. Box 220, Caribou, ME 04736 TEL (207) 496-1511 FAX (207) 496-1501

95-499 E & 95-499.1 E

November 17, 1997

Mr. George Wood  
78 Cressey Road  
Gorham, ME 04038

Subject: Environmental Site Assessment - Phase I & II  
Former Steel Mill Property  
Route 202 and Depot Street  
South Windham, Maine

## **1.0 INTRODUCTION**

In accordance with our Proposal dated August 17, 1995, and signed by you on December 05, 1995, and our amendment to proposal dated November 15, 1995, and signed by you on December 16, 1995, we have completed a Phase I and II environmental site assessment of the site.

**1.1 Scope of Services** - The scope of services is summarized below. Our environmental site assessment included five components:

- |                        |                            |
|------------------------|----------------------------|
| 1) Records Review      | 4) Exploration and Testing |
| 2) Interviews          | 5) Report Preparation      |
| 3) Site Reconnaissance |                            |

Barnard-Marquit Corporation provided copies of appraisals and deeds related to the site for our review. Further details of the components are presented below.

**1) Records Review** - We reviewed records from the sources listed  
***Standard Environmental Records***

Environmental Protection Agency (Boston, MA)

- NPL Site List (1.0 Mile Radius - 11/30/93)

**VIL\_RESP04969**

S. W. COLE ENGINEERING, INC.  
GEOTECHNICAL CONSULTANTS  
95-499 E & 95-499.1 E  
November 17, 1997

- CERCLIS List (0.5 Mile Radius - 10/06/95)
- RCRA Generators List (Site and Adjoining Properties - 10/10/95)
- RCRA TSD Facilities List (1.0 Mile Radius - 10/03/95)
- ERNS List (Site Only - 04/25/95)

Maine Department of Environmental Protection (Augusta, Maine) Bureau of  
Hazardous Materials and Solid Waste Control

- Solid Waste Facility List (0.5 Mile Radius - 3/11/92)
- Underground Storage Tanks (10/10/95)
  - Removed (0.5 Mile Radius)
  - Registered (Site and Adjoining Properties)
- Spill Reports (0.5 Mile Radius)
- Division of Site Investigation and Remediation Uncontrolled  
Hazardous Substances Sites Program List (1.0 Mile Radius -  
05/31/95)

### ***Physical Setting***

Maine Geological Survey

- Sand and Gravel Aquifer Map
- Freshwater Wetlands Map
- Surficial Geologic Map
- Bedrock Geologic Map of Maine

Natural Resources Conservation Service

- Soil Survey Map

United States Geological Survey



S. W. COLE ENGINEERING, INC.  
GEOTECHNICAL CONSULTANTS  
95-499 E & 95-499.1 E  
November 17, 1997

- Topographic Map

### ***Historical Use Information***

Aerial Photographs - We obtained three sets of historic aerial photographs dated from the 1950's to the 1990's from the following source:

- James W. Sewall Company (Old Town, Maine)

#### Town of Windham Municipal Offices

- Assessment Records
- Code Enforcement File
- Attempted an Interview With Fire Department

#### Cumberland County Registry of Deeds (Portland, Maine)

- Deeds From Present Back About 50 Years
- Environmental Liens
- Maps Showing the Site

#### Windham Public Library

- Historical References

#### Windham Historical Society

- Historical Maps and Records

#### USM Library (Portland, Maine)

- Sanborn Fire Insurance Maps

- 2) **Interviews** - We conducted interviews with persons knowledgeable about the site, including owners and/or users of the property and local officials, with regard to:

S. W. COLE ENGINEERING, INC.  
GEOTECHNICAL CONSULTANTS  
95-499 E & 95-499.1 E  
November 17, 1997

- History of Site Uses
- Possible Hazardous Substances or Petroleum Used or Released on the Site or Nearby
- Waste Disposal at the Site
- Site Conditions

3) **Site Reconnaissance** - We physically observed the property. Our assessment included a tour of existing building interiors and a walk of the property. We reviewed site features and took photographs to support our observations of environmental conditions. We did not include a lead-based paint survey, radon testing, asbestos survey or wetlands evaluation as part of the scope of services.

4) **Exploration and Testing** - We coordinated the making of twenty-five test pit explorations at the site. The explorations were made to observe subsurface soil conditions and to obtain soil samples for on-site field testing and laboratory analytical testing. Selected soil samples from the test pit explorations were screened in the field for volatile organic compounds using a PID (Photoionization Detector).

Selected soil samples from the test pit explorations were also submitted to an independent laboratory for analytical testing. The samples were tested to include the following parameters: heavy metals, volatile organic compounds, total petroleum hydrocarbons and polychlorinated biphenyls (PCB's).

5) **Report** - We hereby present our written report, which includes our findings, conclusions, and supporting documents.



S. W. COLE ENGINEERING, INC.  
GEOTECHNICAL CONSULTANTS  
95-499 E & 95-499.1 E  
November 17, 1997

**1.2 Purpose** - This assessment was conducted in order to provide an indication of the potential for environmental contamination of the property by petroleum and hazardous substances from previous uses of the site and adjoining properties.

**1.3 History** - S. W. COLE ENGINEERING, INC. was retained by George Wood in Late 1995 to conduct the environmental services outlined in Section 1.1 in anticipation of a potential purchase of the property. We conducted the work in late 1995 and early 1996. We did not issue a report at that time because the proposed sale of the site was suspended. The use of the site and adjacent properties has not significantly changed since we provided the services indicated in Section 1.1 (Wood, G. 1997). We recently walked the property to review site features and conditions noted by us in 1995 and 1996.

**1.4 Limitations** - This report is subject to the limitations included in Appendix A.

## **2.0 SITE DESCRIPTION**

**2.1 Location and Legal Description** - The site consists of six interconnected structures with adjacent yard and forested areas on 6.5± acres in the village of South Windham, Maine. The site is on Route 202 and Depot Street (see Appendix B, Sheet B-1) and is designated on the Town of Windham Property Map 38 as Lot 7. A plan that illustrates site features that we observed is attached in Appendix B as Sheet B-2. Color copies of photographs of features at the site are presented in Appendix C. A legal description of the site is attached as Appendix D.

**2.2 Current Uses of the Site** - The first floor of the "Manufacturing and Office Building" is used as a machine shop (Crawford, B. 1995). The remaining structure space on the site is used for the storage of metal used in the machine shop, for the storage of equipment